

## 11262900 MUD SLOUGH NEAR GUSTINE, CA

LOCATION.—Lat 37°15'45", long 120°54'20", in SE 1/4 SE 1/4 sec.6, T.8 S., R.10 E., Merced County, Hydrologic Unit 18040001, Kesterson National Wildlife Refuge, on right bank at footbridge, 400 ft northwest of terminus of San Luis Drain, and 5.2 mi east of Gustine.

DRAINAGE AREA.—Indeterminate.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1985 to current year.

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 70 ft above sea level, from topographic map.

REMARKS.—Records good. During major storm events record can be affected by backwater from the San Joaquin River. Discharge is affected by irrigation return and drainage from Kesterson Wildlife Refuge.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 1,060 ft<sup>3</sup>/s, Feb. 8, 1998; gage height, 11.11 ft; maximum gage height, 12.03 ft, Jan. 28, 1997, minimum daily, 0.01 ft<sup>3</sup>/s, Sept. 24, 1991.

## DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

## DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	178	131	167	274	357	83	54	126	75	55	53
2	119	178	133	172	254	356	84	53	100	77	52	52
3	126	179	127	177	233	332	93	52	81	69	55	61
4	132	168	128	181	201	304	93	55	74	69	57	61
5	142	175	123	164	184	269	88	60	79	72	57	62
6	158	172	121	158	172	247	108	72	86	72	55	56
7	177	171	121	155	165	238	103	77	87	74	57	60
8	205	182	118	147	164	238	92	88	84	80	64	56
9	176	182	117	142	168	228	91	93	94	82	63	57
10	166	169	118	139	166	225	85	86	101	78	61	55
11	171	168	117	139	159	220	81	93	103	72	58	55
12	173	196	119	143	165	208	76	102	101	72	55	51
13	182	192	118	141	187	201	69	104	95	68	55	52
14	192	184	117	134	237	243	70	98	92	66	55	43
15	198	184	112	134	303	252	77	89	85	65	56	43
16	206	180	110	133	317	234	78	92	84	73	58	48
17	209	175	114	133	359	205	93	100	83	71	56	54
18	216	165	116	148	362	185	115	106	83	68	58	59
19	238	158	116	163	349	177	141	93	83	65	68	54
20	244	153	117	181	341	166	134	85	95	63	68	52
21	221	152	117	173	343	152	120	82	89	65	65	50
22	194	148	120	177	335	144	115	81	86	66	60	49
23	185	145	120	200	345	131	102	80	82	67	59	51
24	191	139	115	244	356	125	85	84	76	67	63	51
25	197	132	113	296	352	124	73	89	75	66	63	49
26	196	128	113	324	347	129	66	102	72	63	58	43
27	188	127	114	312	347	125	62	109	69	61	58	42
28	174	124	118	300	346	121	57	101	67	60	60	43
29	174	125	122	291	339	108	56	98	62	57	60	46
30	182	126	125	283	---	100	56	99	67	56	61	56
31	182	---	142	289	---	89	---	105	---	57	57	---
TOTAL	5611	4855	3712	5940	7870	6233	2646	2682	2561	2116	1827	1564
MEAN	181	162	120	192	271	201	88.2	86.5	85.4	68.3	58.9	52.1
MAX	244	196	142	324	362	357	141	109	126	82	68	62
MIN	97	124	110	133	159	89	56	52	62	56	52	42
AC-FT	11130	9630	7360	11780	15610	12360	5250	5320	5080	4200	3620	3100

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

MEAN	60.1	75.3	93.2	151	209	175	84.2	50.2	48.1	45.5	39.9	27.1
MAX	189	181	305	545	958	563	229	123	130	114	100	105
(WY)	1999	1997	1997	1997	1998	1998	1986	1998	1986	1998	1987	1998
MIN	3.35	7.53	5.86	6.17	6.96	28.0	19.2	1.76	3.79	7.42	3.36	2.67
(WY)	1993	1991	1991	1991	1991	1990	1992	1992	1994	1994	1994	1990

## SUMMARY STATISTICS

## FOR 1999 CALENDAR YEAR

## FOR 2000 WATER YEAR

## WATER YEARS 1986 - 2000

ANNUAL TOTAL	49785	47617		
ANNUAL MEAN	136	130	87.6	
HIGHEST ANNUAL MEAN			252	1998
LOWEST ANNUAL MEAN			17.6	1991
HIGHEST DAILY MEAN	344	Feb 14	362	Feb 18
LOWEST DAILY MEAN	54	Sep 10	42	Sep 27
ANNUAL SEVEN-DAY MINIMUM	62	Sep 5	46	Sep 23
INSTANTANEOUS PEAK FLOW			370	Mar 1
INSTANTANEOUS PEAK STAGE			7.70	Mar 1
ANNUAL RUNOFF (AC-FT)	98750	94450	63440	
10 PERCENT EXCEEDS	224	238	189	
50 PERCENT EXCEEDS	120	112	53	
90 PERCENT EXCEEDS	74	56	5.2	



## 11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3890	3720	4770	4540	2850	2100	3480	2990	3760	3420	3100	2740
2	3760	3430	4760	4680	---	---	2990	2790	3690	3210	2990	2790
3	3650	3080	4730	4220	---	---	3580	2860	3790	3410	2790	2480
4	3500	3170	4650	4270	3760	3250	3520	3150	3600	3230	2940	2620
5	3640	3120	4290	4090	3580	3040	3170	2970	3720	3130	2910	2780
6	3200	2960	4090	3430	3360	3240	3400	3150	3930	3290	2820	2630
7	3220	3120	3570	3150	3660	3190	3380	3200	3430	3090	2640	2310
8	3220	3070	3220	3050	3710	3340	3320	2970	3170	3070	2660	2500
9	3270	3130	3190	2780	3600	2910	3200	2940	3280	3120	2620	2480
10	3750	3160	3340	2700	2910	2260	3500	3070	3300	3150	2620	2390
11	3900	3630	3040	2640	3120	2370	3570	3120	3400	2960	2490	2120
12	3890	3560	2660	2460	2450	2290	3430	3110	3340	3120	2170	2000
13	3780	3450	2620	2010	3670	2140	3490	3160	3230	3030	2060	1850
14	3830	3660	2510	1060	3480	3280	3520	3240	3300	2930	2140	1810
15	3660	3320	---	---	3550	3330	3520	3300	2930	2580	2060	1810
16	3560	3330	1910	1520	3570	3460	3460	3160	2770	2670	2110	1870
17	---	---	1780	1350	3530	3310	3330	3150	3000	2730	1870	1660
18	---	---	1500	1260	3430	3210	---	---	3140	2930	2050	1790
19	---	---	1770	1500	3460	3220	3300	2620	3120	2840	2240	2050
20	3510	2840	1810	1570	3350	2790	---	---	3240	2570	2300	2150
21	2850	1930	2730	1410	3470	2800	3540	3220	2780	2470	2710	2300
22	2510	1810	2890	2690	3660	3320	3630	3230	2960	2550	3020	2710
23	3260	1980	2850	2480	3580	3320	3680	3320	2820	2510	3020	2730
24	3780	3040	2940	2580	3510	3260	3610	3280	2930	2720	2740	2600
25	4450	3780	3260	2850	3390	3230	3540	3280	2940	2750	2620	2460
26	4510	4370	2920	2610	3670	3270	3700	3350	3050	2740	2640	2590
27	4650	4310	3060	2450	3630	3220	3630	3400	3000	2660	2590	2280
28	4890	4520	3170	2800	3360	3040	3590	3240	2850	2620	2280	2090
29	4820	4510	3290	2840	3480	3280	3620	3400	3060	2790	2150	1950
30	4650	4570	3490	3020	3450	3080	3720	3460	3140	2970	1950	1730
31	---	---	3340	2750	---	---	3730	3390	3150	3020	---	---
MONTH	---	---	---	---	---	---	---	---	3930	2470	3100	1660

## 11262900 MUD SLOUGH NEAR GUSTINE, CA—Continued

## TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25.5	22.0	18.0	16.0	---	---	9.5	8.0	14.5	11.5	15.5	12.0
2	24.5	21.5	18.5	15.5	11.5	10.0	9.5	7.5	14.5	12.5	14.5	13.0
3	24.0	20.5	18.5	16.0	10.5	8.0	9.0	7.0	14.0	12.0	16.0	12.0
4	23.0	20.0	18.5	16.0	10.0	7.5	9.0	7.0	14.0	12.0	17.0	13.5
5	22.5	19.0	18.5	16.0	10.5	8.0	10.0	8.0	14.5	12.0	15.5	13.5
6	23.0	20.0	18.5	16.0	10.5	8.5	8.5	7.0	15.5	12.5	16.0	12.0
7	21.5	18.5	17.5	15.5	11.0	9.0	9.5	7.0	15.5	13.0	14.5	13.0
8	23.0	19.5	17.5	15.0	10.0	8.0	9.0	7.0	16.5	13.0	14.0	12.0
9	24.0	20.0	17.0	15.0	9.5	8.5	9.5	7.5	16.5	14.5	14.5	11.5
10	24.5	20.5	17.5	15.0	9.5	8.0	10.5	8.0	15.5	14.0	16.5	12.0
11	25.0	21.5	17.5	15.0	9.0	6.5	11.5	9.0	14.0	12.5	18.0	14.0
12	23.5	20.5	17.0	15.0	9.5	7.0	11.5	10.5	12.5	11.5	18.0	12.5
13	23.5	20.5	17.0	15.0	10.0	8.0	12.0	9.5	12.5	11.5	19.0	14.0
14	24.0	21.0	16.5	15.0	8.5	6.5	11.5	10.0	15.0	12.5	20.0	16.5
15	22.5	20.0	17.5	15.5	9.0	6.5	11.5	11.0	14.5	12.0	19.0	16.5
16	20.0	18.0	17.5	15.5	9.0	6.5	12.5	10.5	14.0	13.0	19.5	16.0
17	20.5	17.5	16.5	15.0	9.5	7.0	12.0	11.0	14.5	12.0	17.0	13.5
18	20.0	17.5	15.5	13.5	9.5	7.5	14.0	11.5	14.5	12.5	19.0	14.0
19	20.0	17.5	14.5	13.0	9.5	7.5	14.5	13.0	14.0	13.0	20.0	16.0
20	20.5	17.5	15.0	13.0	10.0	7.5	14.5	13.5	14.5	13.5	16.5	12.0
21	21.0	18.0	14.0	11.5	10.0	7.5	14.5	12.0	15.0	12.5	16.0	10.5
22	21.0	18.0	11.5	9.0	10.0	7.5	14.5	11.5	14.0	12.5	18.0	13.0
23	20.5	18.5	11.5	9.5	10.0	7.5	14.0	12.5	13.0	11.5	19.0	15.0
24	19.5	17.0	11.5	9.0	10.0	7.5	13.5	12.5	12.0	10.5	19.0	15.0
25	20.0	17.0	12.0	9.5	10.0	7.5	14.5	13.0	13.5	11.0	19.5	15.0
26	20.0	17.5	12.0	10.0	9.5	7.5	14.0	13.0	15.0	12.5	20.0	15.5
27	21.0	18.0	---	---	9.5	7.5	14.0	12.5	15.0	13.5	20.0	16.5
28	20.0	18.0	---	---	10.0	7.5	13.0	11.5	15.0	13.0	19.0	15.5
29	18.0	15.5	---	---	10.0	7.5	13.0	11.0	14.5	13.0	19.5	15.5
30	18.0	15.0	---	---	10.5	7.5	12.5	11.5	---	---	19.0	16.0
31	18.5	15.5	---	---	10.0	8.5	13.0	11.0	---	---	18.5	14.0
MONTH	25.5	15.0	---	---	---	---	14.5	7.0	16.5	10.5	20.0	10.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19.5	14.5	24.0	19.5	25.0	20.0	28.0	24.5	29.0	27.0	23.0	21.5
2	22.0	17.0	24.5	20.0	26.5	21.5	27.5	23.5	30.0	27.0	22.5	21.0
3	23.0	18.5	25.0	20.5	26.5	22.0	26.0	22.5	30.0	27.5	24.0	20.5
4	23.0	19.5	25.5	21.0	27.0	22.5	25.5	21.5	29.5	27.0	23.5	20.0
5	22.5	18.5	25.0	21.5	27.0	22.5	25.5	21.5	28.5	26.5	23.0	20.0
6	22.5	18.5	22.5	19.5	26.5	22.5	25.5	21.5	28.5	26.0	23.0	19.5
7	22.0	18.0	20.0	18.5	26.5	23.0	25.5	21.5	28.5	25.5	24.5	20.0
8	22.5	18.5	22.5	18.5	24.0	22.0	26.0	22.0	28.0	24.5	25.0	21.0
9	22.0	18.0	23.0	19.0	24.0	20.5	27.0	22.5	28.0	24.5	25.5	21.0
10	22.0	18.0	21.0	18.5	24.5	20.5	27.5	23.5	27.0	24.0	25.0	21.5
11	23.5	19.0	20.5	17.0	24.5	21.0	27.0	23.5	26.5	24.0	25.5	21.5
12	24.0	21.0	21.5	16.5	25.5	21.5	27.5	24.0	27.5	24.5	24.0	21.5
13	23.0	20.0	23.0	18.0	26.5	22.5	26.5	24.0	27.5	25.0	25.5	22.0
14	22.5	19.0	21.0	18.0	29.0	24.5	27.0	23.5	28.0	25.0	27.0	21.5
15	21.0	18.5	21.5	18.5	29.5	26.0	27.5	24.5	28.0	25.0	26.5	21.5
16	19.5	16.5	20.5	18.0	29.0	26.5	27.5	24.5	28.0	24.5	26.5	21.0
17	17.0	14.5	21.5	17.5	29.5	26.0	27.0	23.5	28.5	24.5	27.0	21.5
18	18.5	14.5	23.5	18.5	29.0	25.5	26.5	22.5	27.5	24.5	27.0	22.0
19	19.5	16.0	25.0	20.5	28.0	24.5	27.0	22.0	27.0	24.0	27.5	23.0
20	20.5	17.0	27.5	21.5	29.0	25.0	27.5	23.5	26.5	23.5	29.0	23.5
21	22.0	18.5	28.5	23.0	29.0	25.5	28.0	24.5	26.0	23.0	26.5	22.5
22	21.0	18.5	29.5	24.5	29.5	26.0	28.0	24.0	27.0	23.5	25.0	22.5
23	21.0	17.5	27.5	25.5	29.0	25.0	28.0	24.0	26.5	23.5	24.5	20.5
24	21.5	18.0	28.0	24.0	28.5	24.5	28.0	25.0	26.0	23.0	25.0	20.5
25	22.0	18.5	26.5	22.0	28.5	24.5	28.5	25.0	26.5	23.5	25.5	20.5
26	23.5	19.0	26.0	21.5	29.0	25.5	28.5	25.0	27.0	24.0	25.5	21.0
27	23.5	20.0	26.5	22.0	29.5	26.0	27.5	24.5	27.0	24.5	25.5	21.0
28	21.5	19.0	27.0	22.5	29.5	26.5	27.5	24.5	27.0	24.5	24.5	20.5
29	22.0	17.5	26.5	22.5	30.0	27.0	28.0	24.5	26.0	23.0	24.5	19.5
30	23.5	18.5	26.0	22.0	29.0	25.5	28.0	26.0	24.0	22.5	25.0	20.0
31	---	---	23.5	21.0	---	---	29.0	26.0	24.5	22.0	---	---
MONTH	24.0	14.5	29.5	16.5	30.0	20.0	29.0	21.5	30.0	22.0	29.0	19.5